International Roundtable

on THE IMPACTS OF EXTREME NATURAL EVENTS: SCIENCE & TECHNOLOGY FOR MITIGATION (IRENE)

Colombo, Sri Lanka 13-15 December 2017





Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre)



National Science and Technology Commission (NASTEC), Sri Lanka



Research Centre-Technology for Disaster Prevention, South Eastern University, Sri Lanka (RC-TDP, SEUSL)

Introduction

During the last few decades many countries in Asia and Africa encountered unforeseen natural disasters apparently due to both the climate change and deficiencies of the built environment. It seems that in the last five years such calamities have been accelerated. Their susceptibility is principally based on the geographical, geological and socio-economic characteristics. Once the required information is available on geological, meteorological, sociological, technological and economic aspects of the possible extreme natural events, the disaster prevention and risk reduction process could be done in both parallel and sequential paths.

In recent times, disaster management has acquired development in many fields of technology, especially in the non-conventional or newly emerged disciplines viz., Nanotechnology, Information Technology (IT) based sciences and Remote Sensing and Geographic Information System (GIS), that aid in providing a variety of solutions to reduce human disasters caused by extreme natural events. Even though some developed countries are extensively utilising these technologies in mitigating human disasters due to extreme natural events, in large number of developing nations this knowledge has still not been sufficiently percolated, at least at the conceptual level.

In an environment of escalating extreme natural events, it is highly essential that nations make collective efforts in searching for technical solutions to mitigate disaster, rather than acting on individual basis. In most cases geographically similar regions encounter similar types of disaster, thus sharing the technical experience of each country may save many resources and time.

Since last few years a growing need is being felt for a common solid platform for the concerned professionals and policymakers to extensively deliberate on the above issues sharing their knowledge and experience and focus themselves at finding mechanisms to educate and train the individuals and entities in the third world for working beyond the disaster management policies as well as creating a network. With this in mind the Centre for Science and Technology of the Non-aligned and Other Developing Countries (NAM S&T Centre) in partnership with the National Science & Technology Commission (NASTEC), Sri Lanka and the Research Centre-Technology for Disaster Prevention, South Eastern University of Sri Lanka (RC-TDP, SEUSL) announces the organisation of an International Roundtable on the 'Impacts of Extreme Natural Events: Science & Technology for Mitigation (IRENE)' in Colombo, Sri Lanka during 13-15 December 2017.

Objectives of the Roundtable

The primary objective of the Roundtable is to bring the stakeholders and experts at national and international levels together to share experience and work out strategic S&T interventions to mitigate hazards due to extreme natural events. The specific intent is:

- To upgrade the knowledge base of participants regarding the technological and scientific solutions available for disaster mitigation in the case of extreme natural events.
- To develop a strong networking platform for the participants to share and discuss the views of potential extreme natural events in their respective countries/ regions and seek expert advice on technical and scientific know-how to address the issues in the long run.
- To guide the participants with academic and/or research background to initiate research projects on the topics covered, especially with regional collaborations.

- To attract state and private sectors to fund research and development, awareness promotion activities and international events related to similar topics.
- To convince the policy makers, environmentalists and other concerned organizations that disaster related to extreme natural events is a serious issue that should be addressed as a national priority.

Topics of the Roundtable

This event focusses on the following technological solutions,

- ✤ Advanced forecasting and nowcasting systems
- Mapping and zoning by GIS and ground-based / airborne platforms
- Monitoring and surveillance systems
- IT-based coordination networks and technologies
- Disaster-resilient housing, sheltering and service systems
- Earth stabilization techniques
- Urban planning
- Protection systems, safety structures and smart evacuation techniques
- ✤ Sociological tools,

That are applicable to extreme natural events such as cyclones, heavy precipitation, prolonged droughts, earthquakes, thunderstorms etc. and their consequences such as flash floods, landslides, heath and sanitation issues etc.

Programme of the Roundtable

A tentative programme of the Roundtable is given below:

| DATE | PROGRAMME |
|---|--|
| Tuesday, 12 th December 2017 | Arrival of Delegates at Colombo, Sri Lanka |
| Wednesday, 13 th December 2017 | Inauguration and Technical Sessions |
| Thursday, 14 th December 2017 | Technical Sessions |
| Friday, 15 th December 2017 | Technical Sessions, Discussions and Adoption of Resolution, Field Visits and Sightseeing |
| Saturday, 16 th December 2017 | Departure of Delegates |

The roundtable will include keynote presentations by experts in the field and country reports and technical presentations by the participants, brainstorming and networking sessions and a technical excursion. A detailed Session-wise Programme will be made available before the Roundtable. All proceedings will be conducted in English.

Venue

The Roundtable will be held in Colombo, Sri Lanka. The exact venue will be notified later.

Resource Persons

The resource persons for the Roundtable will comprise eminent professionals from several countries in the field of Disaster Mitigation.

About the Organisers

NAM S&T Centre

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre; www.namstct.org) is an inter-governmental organisation with a membership of 48 countries spread over Asia, Africa, Middle East and Latin America. The Centre was set up in 1989 in New Delhi, India in pursuance of recommendations of various NAM Summit meetings for the promotion of South-South cooperation in Science and Technology (S&T). The Centre undertakes a variety of programmes, including the organisation of workshops, symposiums, meetings and training courses and implementation of collaborative projects. It also offers short-term research fellowships to scientists from developing countries in association with the Centres of Excellence in various developing and developed countries. The Centre also produces technical books and other scientific publications in different subjects. These activities provide opportunity for scientist-toscientist contact and interaction; familiarising the participants on the latest developments and techniques in the subject areas; identification of the requirements of training and expert assistance; locating technologies for transfer between the members and other developing countries, dissemination of S&T information etc. In addition, the Centre encourages academia-R&D-industry interaction in the developing countries through its NAM S&T-Industry Network.

NASTEC, Sri Lanka

The National Science and Technology Commission (NASTEC) is a policy formulating and advisory body of the government of Sri Lanka on matters pertaining to science and technology. It was established by the Science and Technology Development Act No. 11 of 1994.

The NASTEC has been functioning under the purview of the Ministry of Science, Technology and Research. The President of the Socialist Democratic Republic of Sri Lanka appoints the Commission members including Chairman with the recommendations of the concerned Minister.

NASTEC is mandated to formulate policies and plans for the development of Science and Technology and to review the S&T system of the country.

RC-TDP, SEU, Sri Lanka

Research Centre-Technology for Disaster Prevention, South Eastern University of Sri Lanka (RC-TDP, SEUSL) is a research based centre in Sri Lanka, established to develop solutionbased on technological and scientific advancements to minimize the losses caused due to natural and man-made calamities. In addition to the above, the Centre expects in providing low-cost solutions to the public (which can be affordable to large masses) in order to minimize losses in the event of a disaster. From primarily looking inward and engaging with domestic reforms, Centre plays a seminal role in designing and applying sociological tools appropriately to find the compatibility of research outputs with the socio-economic structure of targeted groups.

RC-TDP endeavors to encourage all concerned parties to conduct in-depth research, provide inclusive platforms and invest in the field of disaster mitigation research. It is with this plurality of thought and voices that Centre looks for developing strong international networking with the subject.

Participants

This International Roundtable is primarily designed for scientists, meteorologists, engineers, policy makers, public health specialists, technologists, armed forces and civil administration experts working in the field of disaster mitigation from different countries and industries across the world.

The selection of the participants will be strictly based on merit and relevance of their current responsibilities to the subject of the Roundtable as well as the quality of the extended abstract of the paper to be submitted by them along with the completed nomination form. A pre-condition for participation in the Roundtable is that the participants must submit the final manuscript of their papers, in MS Word, before the commencement of the event.

Submission of Application

Experts and scientists desirous of participating in the Roundtable, *except those from Sri Lanka*, are required to submit their filled-in nomination forms <u>electronically</u> directly to the NAM S&T Centre as early as possible, but latest by **Friday**, 10th November 2017.

Applicants from Sri Lanka should submit their requests directly to the RC-TDP, SEUSL through <u>www.seu.ac.lk/irene2017</u> with a copy to NASTEC (nastecsec@gmail.com), Sri Lanka.

The Nomination Form (blank Form **enclosed**) should be completed in all respects, typewritten or in clear handwriting in capital letters, and no column should be left blank. The following documents must be submitted along with the Nomination Form:

- i) An extended (**about 2 pages**) abstract (**in MS Word format**) of the paper that would be presented at the Roundtable
- ii) A short (maximum two pages) CV (<u>in MS Word format</u>)
- iii) Copy of the relevant pages of the passport

The documents at (i) and (ii) above must be in MS Word Format; .pdf or image files will not be accepted. Hard copies of the Nomination Form and above attachments are NOT required to be submitted.

Presentation of Papers

Each participant will be required to present a research / scientific paper on any of the topics of the Roundtable, as given above.

Publication of Proceedings of the Roundtable

A publication edited by international expert(s) and based on the papers presented by the participants during the Roundtable and also containing papers contributed by other experts in the field will be brought out in the form of a book as a follow up of this scientific programme. Therefore all participants are required to submit the manuscripts of their full papers in **MS-word** format well in advance, but at least 14 days before the commencement of the Roundtable i.e., latest by **Tuesday, 28th November 2017.**

Local Hospitality and Travel

Local hospitality in Sri Lanka including accommodation, meals and local transport for the participants will be provided by the local organisers, NASTEC, from 12th December (noon) to 16th December (noon), 2017 (i.e. from one day before to one day after the completion of the Roundtable). The participants will have to make their own arrangements of stay beyond

these dates and therefore they are requested to book their flights accordingly.

Financial Arrangements for Travel

This is being conveyed separately to each member country of the NAM S&T Centre and other developing countries.

Entry Formalities, Immigration and Health

Participants of the Roundtable must be in possession of a current passport or any other internationally recognised travel document, which must have a period of validity of at least six months beyond the time of stay allowed in Sri Lanka and must be endorsed for travel to Sri Lanka.

Participants should have a valid visa for entry into Sri Lanka. The Sri Lankan diplomatic mission located in the country of a participant should be approached for obtaining an entry visa. If required, the organisers will facilitate the issuance of visa by providing the participants with an official letter of invitation.

Note.

- [°] The governments / institutions of all the participants will be required to bear the following costs:
 - All expenses in the home country incidental to travel abroad, including expenditure for passports, visa, required medical examinations, vaccinations and miscellaneous expenses such as internal travel to the airport of departure in the home country.
 - Salary and other related allowances for the participants during the period of the Roundtable.
 - Cost of medical insurance to cover the period of participation in the Roundtable.

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- The organisers will not assume responsibility for the following expenditure in connection with the participant's attendance in the Roundtable:
 - Expenses incurred with respect to any insurance, medical bills or hospitalisation fees.
 - Compensation in the event of death, disability or illness of participants.
 - Loss of personal belongings or compensation for damage caused to them by climatic or other conditions.
 - Other costs, including airport tax and excess baggage.

Contact Details

NAM S&T CENTRE

Prof. Arun P. Kulshreshtha,

Director General, Centre for Science & Technology of the Non-Aligned and other Developing Countries (NAM S&T Centre), Zone-6A, 2nd Floor, India Habitat Centre, Lodhi Road, New Delhi – 110003,INDIA Tel: +91-11-24645134, 24644974; Fax: +91-11-24644973 E-mail: namstcentre@gmail.com, namstct@bol.net.in, apknam@gmail.com Website: http://www.namstct.org

Mr. M. Bandyopadhyay,

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NATIONAL SCIENCE AND TECHNOLOGY COMMISSION (NASTEC)

Dr. Muditha Liyanagedara,

Director/Chief Executive Officer, National Science and Technology Commission (NASTEC), No. 31/9, 31/10, Dudley Senanayake Mawatha, Colombo 08, SRI LANKA Tel: +94-11-2680711, 2680712, 2680716; Fax: +94-11-2680713 E-mail: <u>drnastec@ yahoo.com</u>, <u>nastecsec@gmail.com</u> Website: <u>http://www.nastec.lk</u>

<u>RESEARCH CENTRE-TECHNOLOGY FOR DISASTER PREVENTION,</u> <u>SOUTH EASTERN UNIVERSITY OF SRI LANKA</u>

Dr. B G N Sewwandi

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In order to avoid confusion, interested scientists from countries other than Sri Lanka may in the first instance please correspond only with the NAM S&T Centre, and not with NASTEC/RC-TDP. All these applications will be initially processed by the NAM S&T Centre. Scientists from Sri Lanka should however submit their requests only to RC-TDP, SEUSL with a copy to NASTEC.

CENTRE FOR SCIENCE AND TECHNOLOGY OF THE NON-ALIGNED AND OTHER DEVELOPING COUNTRIES (NAM S&T CENTRE)

INTERNATIONAL ROUNDTABLE ON 'IMPACTS OF EXTREME NATURAL EVENTS: SCIENCE & TECHNOLOGY FOR MITIGATION (IRENE)'

Colombo, Sri Lanka 13-15 December 2017

NOMINATION FORM

PLEASE TYPE OR USE BLOCK CAPITALS;

NO COLUMN SHOULD BE LEFT BLANK)

SECTION – A

(To be filled in by the nominee)

1 Name (Prof/Dr/Mr/Mrs/Ms):

(As in Passport)

- 2. Father's/Spouse Name:
- 3 Designation (Position held):
- 4. Nationality:
- 5 Date of Birth: Place of Birth (City) (Country).....
- 6 Passport No:Place of issue:

Date of Issue: Valid up to:

(Please attach copies of the relevant pages of your Passport)

7 Name of the Parent Institution (Employer):

Full Address (Office):

Please affix your scanned recent photograph

| | Phone: Fax: |
|----|--|
| | E-mail: |
| 8 | Full Address (Home): |
| | |
| | Phone: Mobile: |
| | Fax: E-mail: |
| 9 | Educational Qualifications: Highest Degree. |
| | Year of Award: University: |
| | Field of Study: |
| 10 | Brief Bio data (CV): |
| | (Maximum two pages, in MSWord; to be attached on separate sheet) |
| 11 | Abstract of your paper proposed to be presented in the Roundtable. |
| | (About 1-2 pages, in MSWord; to be attached on separate sheet) |
| 12 | What in your opinion qualifies you for participation in this roundtable? |
| | (To be attached on separate sheet) |
| | Date: Signature: |

SECTION -B

ENDORSEMENT BY NOMINATING AUTHORITY

(The Applicant in a member country of the NAM S&T Centre must get the following endorsement signed by the Focal Point of the Centre in his/her country, *if he/she wishes to get the financial assistance from the Centre including international airfare as the official nominee of the country.* For the list of member countries and names/addresses of the Focal Points please visit Centre's website <u>www.namstct.org</u>)

Signature:

Name (in full):

Designation:

Date:

SEAL

Enclosures;

- 1. Scanned copies of the relevant pages of Passport
- 2. Brief CV (maximum two pages, in MSWord)
- 3. Abstract of Paper proposed to be presented in the Roundtable (about 1-2 pages, in **MSWord**)